

SR 1901 Widening - SR 1901 is a two lane facility connecting US 70 and the proposed Industrial Connector. Widening the existing twenty foot roadway to twenty-four feet will be necessary in order to safely accommodate the heavy truck traffic expected to use this facility.

SR 1552 Widening - The two lane facility extending between NC 42 and SR 1555 currently has nine foot lane widths. The lane widths need to be widened to twelve feet.

NC 42 Widening - Traffic demand along NC 42 is expected to more than double in the next twenty years. This demand will be the result of continued economic growth and the growth associated with the US 70 Bypass project. Interchanges with freeway type facilities attract development and the NC 42 \ US 70 interchange will be no exception. Widening NC 42 to a four lane facility with twelve foot lanes will increase the capacity of this roadway to roughly 22,000 vehicles per day, more than enough to contend with expected demand.

Construction Improvements and Cost Estimates

The improvements suggested in the Clayton Urban Area Thoroughfare Plan obviously cannot be undertaken all at once, nor should they be. The cost would be overwhelming and the need for many of the improvements is not immediate. In an effort to reflect the relative value of various improvements, an assessment has been made of the benefits that can be expected from each project. These benefits can then be compared to the projected costs involved.

Three principal measures of benefits were used: road user cost savings, the potential for increased economic development resulting from the improvement, and the environmental impact, both positive or negative, which might result. The first measure is an actual estimate of dollar savings, while the others are estimates of the probability of the resulting change.

Reduced road user costs should result from any roadway improvement, from a simple widening to the construction of a new roadway to relieve congested or unsafe conditions. Comparisons of the existing and the proposed facility have been made in terms of vehicle operating costs, travel time costs, and accident costs. These user benefits are computed as total dollar savings over the 20 year design period using data such as project length, base year and design year traffic volumes, traffic speed, type of facility, and volume/capacity ratio.

The impact of a project on economic development potential is denoted as the probability that it will stimulate the economic development of an area by providing access to land with development potential and reducing transportation costs. It is a subjective estimate based on the knowledge of the proposed project, local